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Date: August 26, 2002**Agent's Reference:** 218654**U.S.****Application No.** 09/838,987**Number of pages (including
this transmittal cover sheet):** 3**Filing Date:** April 20, 2001

To: Examiner Michael C. Wilson
U.S. Patent & Trademark Office
Art Unit 1632
Washington, D.C. 20231

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Message:

Dear Mr. Wilson,

In accordance with your request, we have attached a set of marked-up claims (responsive to the Office Action dated March 14, 2002) which have been revised to match the claims as submitted in the Preliminary Amendment filed on April 20, 2001. If you need any additional information, please contact us. Thank you.

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PATENT
Docket No. 218654

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Chamberlain R., et al. Group Art Unit : 1632
Serial No. : 09/838,987 Examiner : Wilson, M.
Filed : April 20, 2001
For : HETEROLOGOUS BOOSTING IMMUNIZATIONS

**LISTINGS OF CLAIMS AMENDED RESPONSIVE TO THE OFFICE ACTION
DATED MARCH 14, 2002**

VERSION WITH MARKINGS SHOWING CHANGES

1. (Twice Amended) A method for [inducing an enhanced immunological response] immunizing a mammal against [at least one] an antigen [in a mammal] -associated disease inducing an effective immunological response against at least one antigen in the mammal using heterologous boosting immunization, said method comprising the steps of:

- inoculating the mammal with a first recombinant vector comprising a DNA vector and a nucleic acid [gene] encoding said antigen; and
- inoculating the mammal with a boosting immunization with a second recombinant vector comprising a second DNA vector and the nucleic acid [gene] encoding said antigen, wherein said second DNA vector is different from said first DNA vector, thereby inducing an effective immunological response thereby immunizing the mammal against the antigen-associated disease.

5. (Twice Amended) The method according to claim 1, wherein the recombinant vectors further comprise a nucleic acid [gene] encoding an immunostimulatory molecule.

In re application of Chamberlain et al.
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9. (Twice Amended) A method for treatment of a cancer in a patient using heterologous boosting immunization as immunotherapy, said method comprising the steps of:

- immunizing said patient with an effective amount of a first recombinant vector comprising a first viral vector and a nucleic acid [gene] encoding a tumor-associated antigen; and
- boosting said patient with an effective amount of a second recombinant vector comprising a second viral vector and the nucleic acid [gene] encoding the tumor-associated antigen, wherein said second viral vector is different from said first viral vector, thereby treating said patient, to produce an effective immune response against the cancer in the patient.

14. (Amended) The method according to claim 9, wherein the recombinant vectors further comprise a nucleic acid [gene] encoding an immunostimulatory molecule.